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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,827	10/12/2006	Stephan Freudenstein	F-9187	4240
28107 7590 10/30/2009 JORDAN AND HAMBURG LLP 122 EAST 42ND STREET SUITE 4000 NEW YORK, NY 10168				
EXAMINER				
LE, MARK T				
ART UNIT		PAPER NUMBER		
3617				
MAIL DATE		DELIVERY MODE		
10/30/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/588,827

**Applicant(s)**

FREUDENSTEIN ET AL.

**Examiner**

MARK T. LE

**Art Unit**

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 9/8/09.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 14-19, 22-25, 27 and 28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 14-19, 22-25, 27-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This communication is responsive to the amendments filed on September 8, 2009. Applicant's amendments and remarks have been carefully considered.
2. Claims 15, 22-23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 15, "the other lower booms" lacks antecedent basis.

In claim 16, line 2, "the section" lacks antecedent basis.

Claim 22 is indefinite for having double inclusions, i.e. defining the same features twice.

Claim 23 is indefinite because it depends from indefinite base claim 22.

3. In claim 27, line 2, the expression "whereby, in the case of a sleeper having two grid supports with four lower booms" is readable as being a possible option rather than a required positive limitation of the claim. If this limitation were intended to be a positive limitation of the claim, the words "in the case of" should not be used.
4. Claims 1-2, 14-18, 22-23 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over German reference (DE 198 49 266) in view of Japanese reference (JP 4-97064).

The German reference discloses a fixed carriageway having features similar to that recited in the instant claims, including sleepers that have reinforcements 4 formed by a plurality of transverse and diagonal rods, a concrete carriageway panel that has

reinforcements formed by longitudinal and transverse rods 8, 9. There is no indication in the German reference that these rods are to be electrically isolated from one another.

The Japanese reference discloses the uses of electrically insulating material 22, insulating spacers or clips 13, and insulating joints 14, in between the re-bars or rods to prevent direct contacts so as to prevent electrical troubles and corrosions (see the English abstract of the Japanese reference).

In view of the Japanese reference, it would have been obvious to one skilled in the art to provide electrically insulating coatings and/or spacers, similar to that taught by the Japanese reference, in the structure of the German reference, such as on the reinforcing rods and in between the rods so as to prevent direct contact, and thus preventing electrical troubles and corrosions.

Regarding the instant claimed transverse rods forming lower booms of a grid support of a sleeper, consider lower the transverse rods 9 and the lower transverse rods of reinforcements 4 of the German reference, which are readable lower booms as broadly claimed. As to the instant claimed insulating coating provided on the rods or booms, note that the rods or booms of the German reference, as modified above in view of the Japanese reference, include insulating coatings as claimed, wherein, the coatings are similar to coating 22 of the Japanese reference.

Regarding the instant claimed lower boom having the insulating coating being at a different height position from the other lower boom, as recited in instant claim 15, consider rods 8 of the German reference which are readable as other booms that are

lower than the transverse rod (the lower boom) positioned above it, as shown in Figure 1 of the German reference.

Regarding the instant claimed insulating coating being provided on only one lower boom of the grid support, as recited in instant claims 14 and 27, it would have been obvious to one skilled in the art to reduce the amount or number of coatings to be used on the rods of the German reference so as to correspondingly reduce costs and the amount of works that have to be done to apply the coatings on the rods, and it would have been obvious to one skilled in the art to not using such coatings on certain rods where it is not critical to the objective of preventing electrical troubles, such as at the places where direct contacts between rods are not necessary present.

Regarding the method steps recited in the instant method claims, note that the process of forming the structure of the German reference, as modified, is considered to require the method steps as claimed.

Regarding Applicant's argument that the German reference and the Japanese reference are not in the same art, note that both references disclose structures relating to the same art of concrete constructions with reinforcing bars or rods, and the teaching of insulating reinforcing rods in the concrete structure of the Japanese reference is considered to be relevant because it would be beneficial in the concrete construction of the German reference that also uses reinforcing bars or rods. Such benefits are clearly expressed in the Japanese reference, which include preventing electrical troubles in various appliances and corrosions of the reinforcing rods.

5. Claims 3, 19, 24-25 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 1, 2, 17 or 18 above, and further in view of Padrun (US 4,617,775).

Regarding the instant claimed overlapping regions of the rods being electrically insulated from one another, consider the overlapping reinforcing bars shown in Figure 1 of Padrun that are connected together by plastic clips 13, 14. In view of Padrun, it would have been obvious to one skilled in the art to form the longitudinal rods of the German references by using a plurality of shorter reinforcing bars and connecting them in an overlapping manner by plastic clips, in a manner similar to that taught by Padrun, because shorter rods are more widely available and more convenient to be handled.

Regarding the method steps recited in the instant method claims, note that the process of forming the structure of the German reference, as modified, is considered to require the method steps as claimed.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK T. LE whose telephone number is (571)272-6682. The examiner can normally be reached on Mon-Fri, between 8:15-4:45 (Teleworking).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Le/  
Primary Examiner  
Art Unit 3617

mle  
10/29/09